



# TROPIC NEWS

DEPARTMENT OF PLANNING AND NATURAL  
RESOURCES

DIVISION OF FISH AND WILDLIFE

October 1995

Volume 8 Number 1

## Recycling Pays

IT STARTED OUT AS A "DO-GOOD" ACTIVITY, THEN EVOLVED INTO A NECESSARY BURDEN FOR MUNICIPAL GOVERNMENTS. NOW, QUITE SUDDENLY, IT HAS BECOME A REAL REVENUE-PRODUCER.

For a quarter-century after the first Earth Day, recycling advocates were forced to spend much of their energy trying to make their case to skeptical decision makers. Essentially, recycling was seen as a "do-good" activity. But now, what was seen as a burden has become a major asset, and those communities that had the foresight to set up solid recycling programs a few years ago are beginning to reap real awards. Since early 1994, prices for nearly all commonly collected recyclable have skyrocketed.

New York City, which two years ago was paying \$6 million per year to get rid of its newsprint, now expects to earn \$20-25 million from selling the same material over the next year, says recycling chief Bob Lange. Early in 1994, Madison, Wisconsin was paying \$13 per ton to the processors who took its recyclables; by the end of the year it was receiving nearly \$23 per ton.

The most dramatic growth has occurred in prices for used paper products. In early May 1995, a ton of baled corrugated cardboard that sold for \$45 to \$50 in 1991 or 1992 was commanding \$230 to \$250. What happened to cause these jumps? To some degree, they are a result of international economic developments. Simultaneous economic upturns in Japan, North America, and Western Europe have driven up demand and prices for many commodities, both primary and recycled. Increased aluminum prices are largely the result of a January 1994 international agreement between the major aluminum-producing nations to reduce their production.

Demand for products with recycled content has increased substantially with the rise of government and private procurement programs that give them preference, and experience with recycled-content products has removed much consumer apprehension about their suitability for a variety of uses. Most important, large capital investments have resulted in a dramatic expansion of industrial capacity for recycling. North American industry is "buying in" to recycling.

The preceding was summarized from an article by John E. Young entitled, "The Sudden New Strength of Recycling" World Watch July/Aug 1995.

## QUOTE

"The thing I want to emphasize is the vast difference between recycling for the purpose of feeling good and recycling for the purpose of solving the trash problem."

-Barry Commoner in *Orion*  
*Nature Quarterly*, Winter 1990

## Don't get bent!

What does this chic fashionable lady have in common with the divers' decompression illness?

In the early 1870's at the St. Louis Bridge, the decompression sickness received its familiar name, the "bends." Laborers with decompression sickness sometimes walked with a slight stoop, a posture affected at the time by fashionable women and known as the Grecian Bend.



The underlying cause of the illness - bubbles in the blood or tissue - was established as early as 1877, and the disease has been studied intensively since. Gas bubbles were first implicated in the disease by the french physiologist Paul Bert. He proved that the bubbles were composed of nitrogen; because oxygen is metabolized by tissue cells, it is not usually a problem during decompression.

Today the main group of people at risk are divers. To avoid the disease, divers use either tables or waterproof computers that tell them how deep and how long they can stay down without undue risk. These tables evolved from work in the early years of 20th century by the British physiologist John S. Haldane.

The term "decompression illness" refers to both decompression sickness and arterial gas embolism. Both are a function of bubbles and differ mainly in the ways in which the gas gets into the body and their symptoms. Arterial gas embolism occurs by holding one's breath while ascending, thus preventing gas expanding within the lungs from escaping.

As the pressure surrounding the diver's body decreases, gas in the lungs expands and can rupture the organ and escape into the blood. Decompression sickness is a consequence of nitrogen bubbles that form within the tissues. The inert gas that causes the condition enters the body during a dive through the lungs and, at the elevated pressures of the ocean's depths, dissolves in the blood. Circulation carries this dissolved gas to the capillaries where it diffuses into the tissues. If ascent is too rapid or decompression stops are not made, the nitrogen bubbles out of solution and blocks blood flow at joints and in the brain.



Modern treatments for decompression sickness have their origins in 19th century observations that when afflicted men reentered the pressurized caisson, their bends symptoms often improved - a consequence of reduced bubble size. At about this time, Bert reported that breathing pure oxygen helped to relieve signs of bends in animals. Nowadays virtually all treatment involves recompression and slow decompression while breathing oxygen. Although recompression several hours or even days after the onset of symptoms can result in improvement, a favor-

## Sea Turtles and Light

Earlier in the year, many sea turtles laid their eggs on our local beaches. Hatchlings have been emerging from their nests for the last few months. The date of emergence depends on the date the eggs were laid and the incubation period of the nest (typically 50-60 days). Hatchlings ready to emerge wait just beneath the sand surface until conditions become cool. This temperature cue prompts hatchlings to emerge primarily at night, although some late afternoon and early morning emergences are known.



Hatchlings possess an inborn tendency to move in the brightest direction. On a natural beach, the brightest direction is most often the open view of the sky nearest the horizon. Hatchlings also tend to move away from darkly silhouetted objects associated with the dune profile and vegetation. Hatchlings emerge and locate the sea at all phases and positions of the moon; it is a myth that hatchlings depend on the moon to lead them seaward.

Hatchlings that crawl toward artificial light sources follow the same instinctive response that leads them seaward on naturally lighted beaches. However, it is the glaring light of artificial sources that leads hatchlings astray causing them to be run over by cars or eaten by predators. Call the Division for tips on preventing this from happening.

Locally, the nest success of our Green and Hawksbill turtles have been considerably affected by the recent hurricanes. Reports indicate that many nests were washed away by the strong wave surges.

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Trees were saved by printing on recycled paper

## Who's Who at DFW

By the time the second cup of coffee kicks-in she can be found doing just about any number of tasks assigned to her. Ginger Titania Chapman, the newest addition to the division is a Fisheries Resource Biologist. Ginger is a graduate of The University of the Virgin Islands with a Bachelor of Science degree.



Ginger enjoys swimming, scuba diving and basically being outdoors. Her ideal afternoon would be spent in a hammock under a tree reading about marine organisms. You can be sure that just about every time you engage in a conversation with Ginger, you walk away feeling entertained.

Prior to working with the V.I. Government, Ginger was employed as an FCC Licensed Marine Radio/ Telephone Operator at V.I. Radio. She described her four and a half years at V.I. Radio as "very interesting."

Assessing and monitoring the habitats and fish assemblages in our recently established St. James Marine Reserve located on the south shore of St. Thomas will be Ms. Chapman's main concentration at the division.



This newsletter was funded by the US Fish and Wildlife Service, Sport Fish and Wildlife Restoration Acts, the Caribbean Fishery Management Council and the Government of the VI.

GOVERNMENT OF THE VIRGIN ISLANDS  
OF THE UNITED STATES

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